

ABSTRACT OF THE DISCLOSURE

A network of remote sensing node assemblies, a first and second of which each has
5 a sensor element, as well as associated technique and program code for transmitting
information collected about a liquid environment. The network provides the capability of
sensing the liquid to collect a wide variety of types of information/data about the liquid and
any surrounding environments, and transmitting from the originating node assembly to a
different node within acoustic transmission range, and then transmitting further to a third
10 node assembly where the information may be processed and communicated to a user, or
further transmitted by way of suitable medium, preferably as electromagnetic signals, to a
host location for processing into a compilation of data. Each of at least two sensing node
assemblies has at least one sensor element adapted for operation while immersed within the
liquid, a source of power, and a transducer for receiving acoustic waves/signals transmitted
15 from another node assembly. The transducer is adapted for emitting sensor information
collected by one or more sensor element(s) at that node, as well as acting as a pass-through
node for information collected at other nodes. A third node assembly of the network is
adapted for receiving and processing sensor information acoustically transmitted from other
nodes. The third node can have its own processor unit(s) and means for transmitting
20 sensor information to a remote host, whether originating at the third node (if so equipped)
or another node assembly